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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/647,895
Filing Date: August 26, 2003
Appellant(s): BLUMENTHAL ET AL.

Allan M. Lowe
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed June 5, 2006 appealing from the Office action mailed May 13, 2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

This appeal involves claims 15-17, 20, 21, 31-34.

Claims 18, 19, and 30 are allowed.

Claims 22-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-14 and 35-38 have been canceled.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is incorrect.

No amendment has been filed with the Appeal Brief filed June 5, 2006.

The amendment after final rejection filed on December 13, 2005 has been entered. Note the Advisory Action of December 23, 2005, for example.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

4,247,261

Springston

1-1981

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

Claims 15, 16, and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Springston (US 4,247,261). Springston shows a water pumping arrangement (20) comprising a sheath (22) and propeller (28). The sheath has an inlet (26) at the bottom of the sheath and an outlet (24) at the top of the sheath. The propeller draws water into the inlet and pushes it out of the outlet. The outlet is positioned below the surface of the body of water (fig 1). Holes (50) add to the effective inlet area, such that through conservation of mass and momentum the outlet (24) water velocity is necessarily higher than the inlet (26) water velocity. The turbulent flow and acceleration due to the nozzle effect is capable of causing air bubbles to be induced in the water above the outlet. Springston teaches that the sheath can be suspended from a boat.

It is noted that claim 15 recites an intended use: "arranged for causing..." in lines 3-9. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). The sheath could be used while the craft is moving forward.

Regarding claim 16, the propeller axis can be vertical (column 3, lines 1-4).

Regarding claim 34, Springston shows a vertically extending flexible connector (34) that holds the sheath. Springston teaches that the sheath can be suspended from a boat. So the connector is necessarily between the boat and sheath.

Claim Rejections - 35 USC § 103

Claims 15, 17, 20, 21, and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Springston (US 4,247,261). Springston discloses the elements of claim 15. Regarding claim 17, Springston does not disclose a plurality of sheaths and propellers. However, it is within the range of knowledge of the skilled artisan to use more than one sheath and propeller. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a plurality of the pumping arrangements (20) shown by Springston. The motivation would be to de-ice a larger area of the water surface.

Regarding claim 20, Springston teaches that the device, in its operation, is suspended at a desired depth, e.g. 3 or 4 feet below the water surface. This teaching is not limiting and does not exclude shallower depths. It would be within the range of knowledge of the skilled artisan to suspend the outlet at any desired depth below the surface. Furthermore, in the transient state of lowering the pumping arrangement (20) from the surface to the desired depth, the outlet will necessarily pass through the 4 to 6 inch depth. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to position the outlet about 4 to 6 inches below the surface, at least temporarily, for the purpose of lowering the pumping arrangement from the surface to the desired depth.

Similarly for claim 21, in lowering the pumping arrangement from the surface to the desired depth, the inlet will pass through a depth of 24 to 30 inches. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to position the inlet about 24 to 30 inches below the surface, at least temporarily, for the purpose of lowering the pumping arrangement from the surface to the desired depth.

Regarding claim 31, Springston teaches that the pumping arrangement can be suspended from a boat but does not specify what type of boat. Springston further teaches that the pumping arrangement is useful in marinas and navigable waterways. The catamaran is a common and well known type of boat that is found in both marinas and navigable waterways. It would be obvious for a catamaran owner to use the Springston arrangement for the purpose of keeping ice off of his boat. Therefore it

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would have been obvious to one having ordinary skill in the art at the time the invention was made to use the pumping arrangement with a catamaran. The motivation would be to de-ice the water around the catamaran.

Regarding claim 32, Springston discloses that the sheath is suspended from a boat by lines (34, 36). Lines (32, 34) are a structure carrying the sheath. Springston does not disclose sheath is suspended forward of the forward end of the boat. It is within the range of knowledge of the skilled artisan to suspend the sheath at any location around the perimeter of the boat. The motivation is to remove ice from a particular location. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to suspend the sheath from the front of the boat, forward of the bow of the boat. The motivation would be to de-ice the water around the bow.

Regarding claim 33, the lines are flexible and can pivot relative to the longitudinal axis of the boat.

Allowable Subject Matter

Claims 18, 19, and 30 are allowed.

Claims 22-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

(10) Response to Argument

Applicant argues that the limitation “while the watercraft is moving forward in a body of water” defines the invention over that of Springston. This is not persuasive. The added limitation is in the middle of an intended use (or functional) recitation. The prior art reads on the claims if it is theoretically capable of performing the intended use or function. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). In this case, the sheath could be used while the craft is moving forward.

Applicant further asserts that the examiner has ignored elements of the claim (Remarks of 10/28/05, page 7). This is not persuasive. It is described in paragraph 4 of the Final Rejection (5/13/05) how the outlet velocity is greater than the inlet velocity. It is described in paragraph 5 of the Final Rejection how this could possibly happen during the craft moving forward. Therefore, no elements have been ignored. Therefore, applicant's argument is not persuasive.

Applicant further argues that the Springston ('261) patent teaches that the apparatus can only be used on the floor of the body of water (Remarks, pages 7-8).

This is inaccurate and not persuasive. Springston teaches that the apparatus can be used in either of two ways: (1) suspended vertically or at an angle at any desired depth below the surface, or (2) while resting on the bottom of the body of water (see Springston column 1, lines 64-68 and column 2, lines 29-33). Therefore, the apparatus can be suspended below the surface but not resting on the bottom. Therefore, the apparatus could theoretically be used while the boat is underway. For these reasons, applicant's argument is not persuasive.

Applicant further argues that the Springston device cannot be used while moving forward because shore power is required to operate it (Remarks, page 8). This is not persuasive. Applicant is making a mere assertion that is unsupported by any evidence. Furthermore, applicant is making an assumption of the type of power available on any given vessel. For these reasons applicant's argument is not persuasive.

Applicant further argues that the Springston apparatus must be used while the boat is not moving based upon a Declaration (Remarks, page 8). This is not persuasive. The argument states that the declarant has intimate knowledge of the Springston apparatus, and that he has never seen the Springston apparatus used while the boat is moving. Even if this is true, it does not overcome the rejection. Claim 15 recites an intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Here the Springston apparatus is capable of being used while a boat is moving forward. The fact

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that the declarant has never seen it happen doesn't make it impossible. Therefore, applicant's argument is not persuasive.

Additionally, when docked the boat would be moving somewhat with the tides and waves, so that the device would be moving with the movement of the boat.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Stephen Avila

Primary Examiner



STEPHEN AVILA
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TC 3600

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